

Device Modeling Report

COMPONENTS: CAPACITOR/Electrolytic
PART NUMBER: TC04RKME50VB1
MANUFACTURER=Nippon Chemi-con Corporation



Bee Technologies Inc.

Theory: Auto Balancing Bridge Method

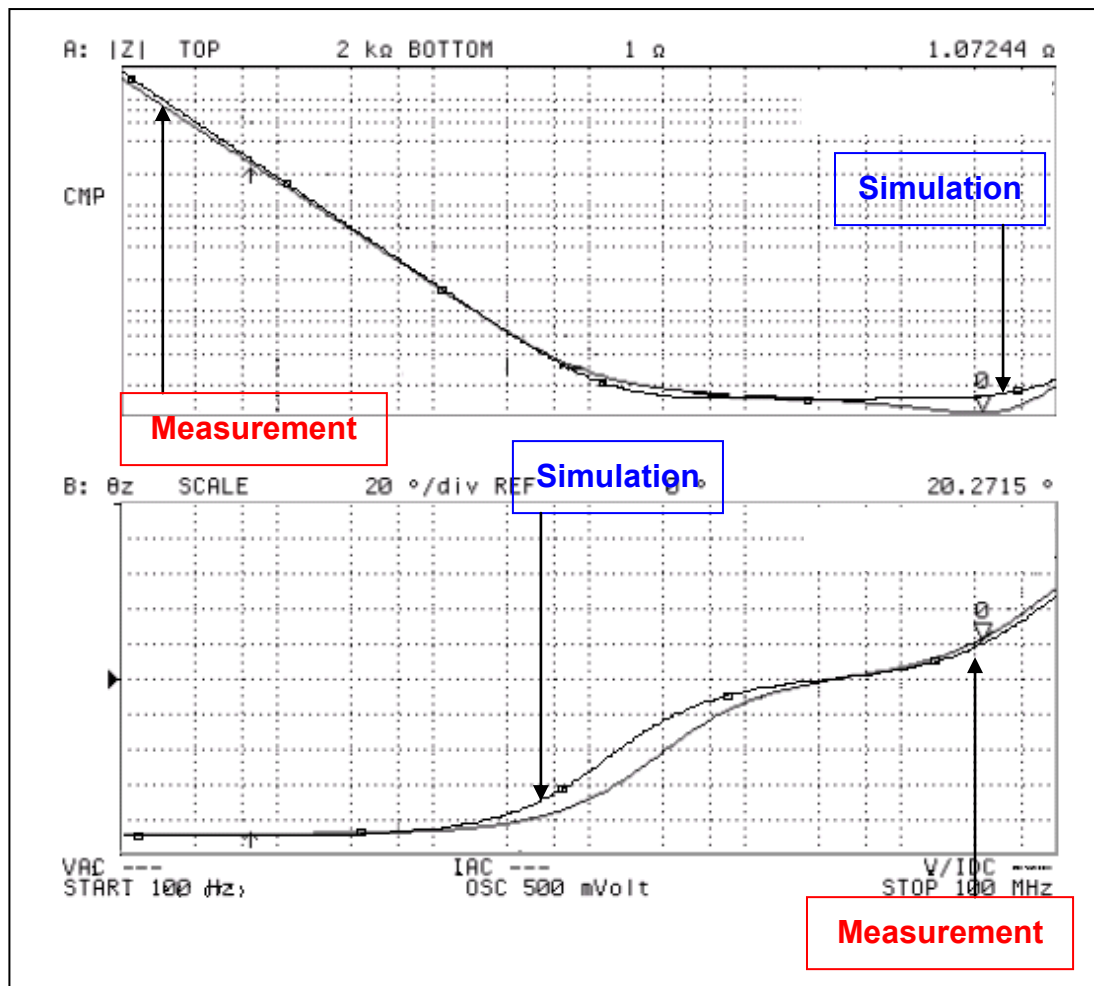
Optimization of Simulation

Range of adjustment Frequency: 100Hz to 100M(Hz)

Frequency vs. $|Z|$ and Frequency vs. θ_z Characteristic

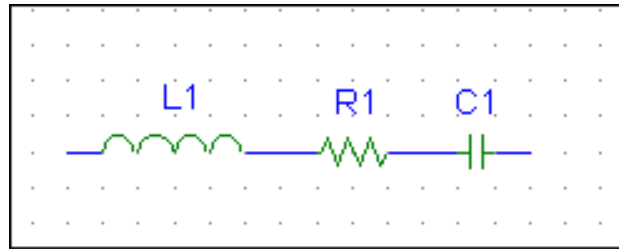
Attention)

Please use SPICE MODEL within the range from 100Hz to 100M(Hz)



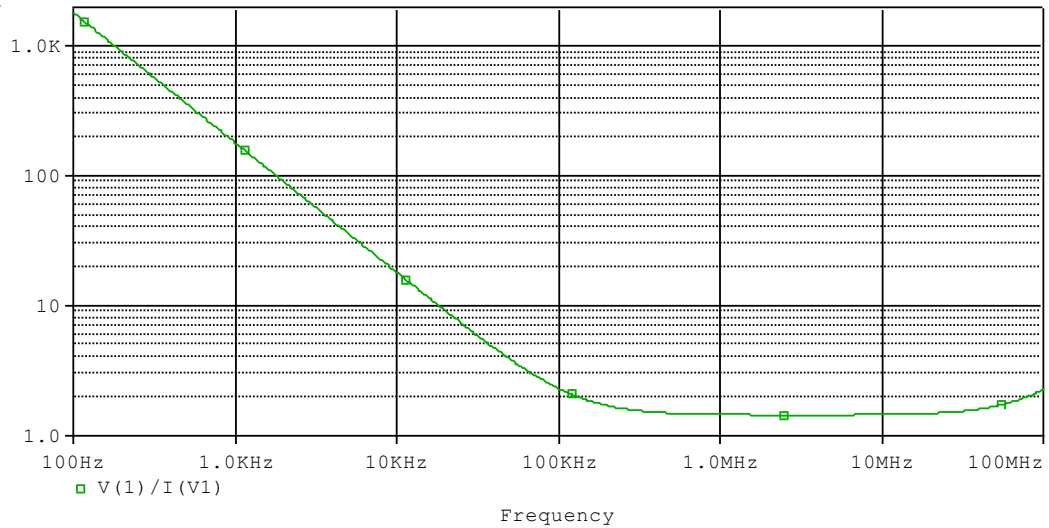
L1	
C1	
R1	

Equivalent circuit

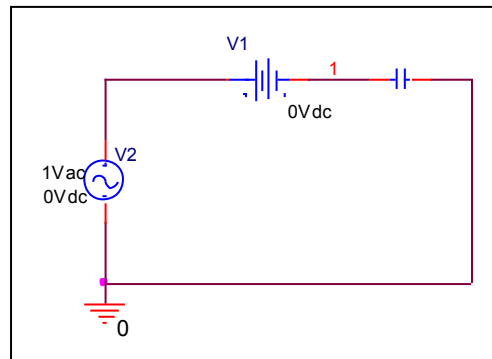


Frequency vs. |Z| Characteristic

Circuit Simulation result



Evaluation Circuit



Simulation result

Frequency (Hz)	Z (ohm) :Measurement	Z (ohm) :Simulation	% Error
100	1670.000	1814.800	8.671
1K	173.000	180.765	4.488
10K	18.050	18.205	0.859
100K	2.390	2.303	-3.628
1M	1.470	1.459	-0.728
10M	1.350	1.459	8.044
100M	2.000	2.190	9.500